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THE EFFECT OF EMPLOYMENT ON THE SOCIO-MEDICAL ADJUSTMENT OF THE DIABETIC RECEIVING CLINIC CARE

by

Audrey B. Fountain

A Thesis Submitted to the Faculty of the School of Social Work of Loyola University in Partial Fulfillment of the Requirements for the Degree of Master of Social Work

June

1952

LIFE

Audrey B. Fountain was born in New Orleans, Louisiana, July 16, 1912, and has lived in Evanston, Illinois since 1914.

She was graduated from the Evanston Township High School Evanston, Illinois, June, 1931, from the University of Illinois, June, 1935, with the degree of Bachelor of Science, and from Northwestern University in August, 1941, with a degree of Master of Music, earned during summer sessions at Northwestern University.

From 1935 to 1943, the author taught music in grade and high schools in South Carolina, Virginia, Kentucky, and has done substitute teaching in Gary, Indiana. In 1943 she began work with the Cook County Department of Welfare. Graduate studies were begun at Loyola University in February, 1947.

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CHAPTER I

INTRODUCTION

A. Views in Literature Related to Subject of Thesis

Since it has been found that experiencing physical illness is usually traumatic to the individual, it seems expedient to consider the positives in his situation in helping him in his total adjustment to the illness.[1] Adjusting successfully to the illness is one positive that may require a considerable measure of self-discipline, especially if the illness is diabetes.[2] The ability to maintain some measure of economic security through satisfying, socially approved employment would generally be conceded as a major positive also requiring self-discipline.[3] The diabetic who is employed, therefore, is faced with the implications and disciplines of his illness plus those of his employment. If the employed diabetic attends a clinic for treatment, the investigator has observed that such a patient is confronted with

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1 Harriett M. Bartlett, Medical Social Work, Chicago, 1934, 43, 144, 145.

2 Mary E. Tangney, Diabetes and the Diabetic in the Community, Philadelphia, 1947, 240.

3 Federal Security Agency, Office of Vocational Rehabilitation, Vocational Rehabilitation for Civilians, (Revised June, 1949), 24.

problems concomitant with this type of care.

Employment, then, being a major factor in his situation, consideration of its effect on the socio-medical adjustment of the diabetic receiving clinic care seems important.

B. Purpose and Significance of Thesis

It is the purpose of this thesis to discover significant adjustments of the employed diabetic. The study is undertaken with awareness of its possible significance in pointing up the extent to which control and management of diabetes allows for normal living; in clarifying the area of job selection for diabetics; in emphasizing factors in employment which most readily affect the diabetic's adjustment to his illness; and in revealing areas in which further study of the needs of the diabetic would be of value.

C. Selection of Cases for Study

In selecting the study group, the dietician's card file on active diabetics attending Mercy clinic was inspected to discover the employed diabetics who attended during the period of January 3, 1951 through October 31, 1951. As many of the employed, well-adjusted diabetics were being given appointments spaced at three-month intervals, this period represented a span of time during which these patients would have probably been seen a minimum of three times. Records of patients seen a lesser number of times would not show as much evidence of problems or progress as desired for this study. It was found that it was often difficult to con-

tact patients not seen in the clinic within a three-month period because of unreported changes of address, so it was judged practical to consider for this study patients who were seen at least once during the last three months of the period used for study.

D. Scope

Thus the study group consists of employed diabetics who were attending the clinic who met the following conditions: they had no less than three visits to the clinic during the period of January 3, 1951 through October 31, 1951; they attended at least once during the period of January 3, 1951 through May 31, 1951; their last visit was within the period of August 1, 1951 through October 31, 1951. Out of a total diabetic clinic registration of 246, during the period studied, twenty were shown to be employed. Seventeen of the employed number met the above requirements.

E. Methods Used in Study

The direct interview, questionnaire, and the schedule were the most important methods used in gathering data concerning the seventeen patients. Some information was also obtained through direct observation in the clinic. Interviews were held with the director of the clinics, director and social worker of the Social Service Department, Mercy Free Dispensary, Chicago, Illinois, clinic doctors, and each patient of the study group. Most of the patients were interviewed while they were attending clinic, however, four home visits had to be made to interview

patients who missed clinic appointments or who were not due in the clinic before the conclusion of the time set for gathering information. While interviewing the patients the writer filled out a questionnaire[4] for each patient. A schedule,[5] on which names and other directly identifying information were disguised properly, was filled out for each of the seventeen cases studied. Information was also gathered from the clinic records, which are the unit type records containing social and medical information on the patient. There was opportunity to directly observe many factors while working with the clinic personnel and being present most of the time during the doctors' contact with the patients.

F. Description of the Clinic

The Diabetic Clinic is one of the special clinics of the Mercy Free Dispensary. There are thirty-five clinics in the Dispensary.[6] Although the Dispensary is a separate unit, it is administered as an integral part of Mercy Hospital.

History

The Sisters of Mercy, pioneer welfare workers in Chicago, established Mercy Hospital in 1850.[7] In 1919, the Dispensary

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4 See Appendix I.

5 See Appendix II.

6 See Appendix III.

7 U. S. Department of Commerce, Bureau of the Census, Benevolent Institutions: 1910, Washington, 1913, 274.

division was taken over by the National Catholic War Council. The basic purpose and aims of the Dispensary were expressed in a letter from the Director of the Dispensary and Social Service Department to be circulated to priests in the different parishes of the diocese:

> The National Catholic War Council have established a Dispensary and Clinic in connection with Mercy Hospital and St. Mary of Nazareth Hospital and in August will open one in St. Joseph's Hospital.
>
> While these were primarily established to care for the discharged soldier, sailor, and his dependent, the need of the general public has been so great, that they are now open for the medical care of all worthy people.
>
> His Grace, Archbishop Mundelein, and the Associated Catholic Charities have shown the closest co-operation and sympathy in this work. We now ask for your interest and trust that you will send all those under your care and supervision, who are in need of dispensary and clinic service, to these institutions.
>
> In each case the staff of the hospital is the staff of the dispensary and you may be assured that our service is the best possible. I am enclosing a list of clinics for reference use.[8]

The original clinics did not include a diabetic clinic. It was established possibly twenty to twenty-five years ago with only one doctor included on the staff servicing the patients.[9]

Personnel

Present personnel includes three doctors who volunteered

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8 Letter from Julia P. Kennedy, Director, Dispensary and Social Service Department, July 1, 1919.

9 Statement of Dr. N. L. Campione, personal interview.

for service in the clinic, who are unsalaried, and who are appointed through the Stritch School of Medicine, Loyola University. Salaried staff consists of one nurse, two dieticians, three laboratory workers, and one medical social worker. These salaried staff members service some of the other clinics in the Dispensary in addition to the Diabetic Clinic. Medical students under the direction of the Diabetic Clinic doctors attend the clinic.

Attendance

In 1951 diabetic patients made 2,125 visits to the clinic. Two hundred and twenty-four visits were made in October, 1951. As shown by the table below, this was the largest attendance for any month in 1951.[10]

TABLE I

ATTENDANCE IN DIABETIC CLINIC, MERCY FREE DISPENSARY, 1951

Month	Number of Visits
January	190
February	160
March	151
April	147
May	174
June	189
July	149
August	196
September	178
October	224
November	199
December	168

10 Mercy Free Dispensary, Monthly Reports for the Year 1951, from records of the Director of Clinics, Sister Mary Lorenzo.

From time to time controlled, cooperative diabetic patients are transferred from the Diabetic Clinic to the General Medicine Clinic. This is one reason for the fluctuation in attendance figures.

Financing

The Dispensary as a whole is financed by a contribution from the Mercy Hospital, private contributions, fees from patients who are able to pay, fees from welfare agencies for their clients and deficit financing from the Community Fund. If the individual meets the financial regulations for care in the Dispensary, he is accepted as a patient. Patients pay according to their ability, and if financially unable to do so, are given services, medication, and equipment free of charge. No verification is made of the financial status of the patients who pay, however their financial situation is reviewed with them at various intervals and on the basis of the review their financial status with the clinic may be changed. At the time he applies for clinic care, the prospective patient is interviewed by an admitting worker who codes him according to an estimated ability to pay for his care determined by the information he gives concerning his financial situation. Patients coded "A+" pay $1.50 to $2.00 for visits; those coded "A" pay $1.00; patients coded "B" pay 50¢, and those having the code "C" pay 25¢. Patients coded "D" do not pay fees. The code "C/D" means the patients pay 25¢ for the visitsand nothing for medication or special services. Fees for medication and special services are charged according to coding and are the same as the

charges for visits, except that a patient coded "A" might in some instances be asked to pay the exact cost of medication or special services.

Clinic Routines and Services

If the patient is accepted for care in the Dispensary, the admitting worker schedules him for a complete physical examination in the Physical Diagnosis Clinic. Routinely in the Physical Diagnosis Clinic a complete medical history of the patient is taken, arrangements are made for a urinalysis, complete blood count, Kahn blood test, and chest X-ray. Also, referrals are made to the special clinics that seem indicated by the complete physical examination. The patient returns to the General Medicine Clinic for an evaluation of laboratory tests and for treatment. If it is found he has diabetes, it is likely he will be treated in Diabetic Clinic, a specialty clinic. In the Diabetic Clinic the patient is instructed to bring a specimen of his urine each time he has an appointment in the clinic. This he takes to the clinic laboratory for analysis. He is then weighed by the nurse who records his weight on the diabetic chart in his unit record, attaches the report of the laboratory analysis of the urine specimen, and takes the complete record to the doctor. The doctor gives the new patient a trial dosage of insulin and briefly instructs him in its use and the prescribed diet, and tells him when he is to return for his next appointment.

The dietician then sees the new patient (or an old patient if necessary) and gives him more complete diet instructions. Next, the nurse instructs him in the use and care of diabetic equipment. All equipment and medication can be obtained in the clinic. During successive visits, the doctors and dieticians evaluate and record the patient's progress, and he is informed of and instructed in any variations or changes in his medication, diet, or personal habits that seem necessary. Additional laboratory tests and referrals to other clinics or to the Social Service Department are made when it appears advisable. The medical social worker serving the Diabetic Clinic is the representative of the Social Service Department and receives referrals from the dieticians, nurse, doctors, medical students, or may be approached by the patient himself. It is the function of the medical social worker to interpret the meaning of the disease to the patient and his family, helping in the acceptance and understanding of the disease and its limitations; to coordinate with the patient the work of doctors and dieticians; to facilitate the use of medical treatment by interpretation to doctors of the patient's social situation or feelings which might impede medical care; to contribute to the educational experience of the medical students and student social workers by helping them to see problems related to the patient's social situation; to help emotionally disturbed patients by supportive therapy, or making referrals for psychiatric care; to make indicated referrals to other agencies; to interpret the clinic's

functions and patient's needs to other agencies and the community; to be responsible for some statistical and social records on the patients; and to present cases for case study to the social work staff.[11]

Aims

Among the aims of the Diabetic Clinic are those of teaching medical students the fundamentals of the management of diabetes; exercise of the scientific management of diabetes; seeing, evaluating and interpreting the patient's total situation and its effect on his illness; preparing the patient to accept employment if this is a possibility, and, at the same time, rehabilitating him spiritually.[12]

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11 Statements of Mrs. Julia Benkoff, Medical Social Worker of Mercy Diabetic Clinic, personal interview.

12 Statements of Dr. N. L. Campione, personal interview.

CHAPTER II

DIABETES AND ITS GENERAL IMPLICATIONS

A. Reason for Review of the Disease

Some knowledge of diabetes, its problems and its implications is necessary in order to arrive at a more valid estimation of the employed diabetic's adjustment to this disease.

Accordingly, there is presented in this chapter pertinent information concerning diabetes and its general implications as found in related professional literature.

B. Definition of the Disease

Diabetes, generally referred to as diabetes mellitus, is a disease in which the body's normal ability to use or metabolize food is impaired. Increased amounts of sugar in the blood and the resulting excretion of sugar in the urine manifest the presence of this disorder. An actual or relative deficiency of insulin due to a disturbance in the functioning of the islands of Langerhaws which are found in the pancreas, or faulty action of insulin in the tissues are largely responsible for the disease. Insulin is necessary for adequate combustion of dextrose in the tissues and has an influence on the metabolism of proteins and

fats in the body. It appears that all the processes concerned with the changing of foodstuffs into energy are brought about by various enzymes or ferments of the body and these enzymes seem to be controlled or activated by the secretion of insulin within the pancreas. When dextrose accumulates in the blood because it is not being burned or stored, glycosuria (a condition in which sugar or glucose is excreted in the urine) results followed by symptoms found in the diabetic syndrome.[1]

C. Prevalence

Several investigators making recent estimates of the number of diabetics in the United States have based their reports on the census, a national health survey, reports from insurance companies, and the diabetes screening program carried out under the auspices of the United States Public Health Service and the American Diabetes Association. The data which evolved indicated that there are over 2,000,000 cases currently in the United States. An increase in the frequency of the disease is pointed up in the statistics represented in this count. The increase is due partially to the increased longevity of the population as a whole since diabetes is most common in women past middle life, and women outnumber men in the older age group. General application of improved methods of diagnosis and treatment is also an

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1 Lilly Research Laboratories, Diabetes Mellitus, Indianapolis, (1951), 13-19.

explanation for an increase in cases of diabetes. No age is exempt from diabetes, and a study of the incidence of diabetes in over 45,000 selectees showed that the disease is three to four times more prevalent in young adults than had been assumed on the basis of earlier studies in this area.[2] The United States Public Health Service chose Oxford, Massachusetts in which to make a detailed study of diabetics in a typical community. The Journal of the American Medical Association made the findings public in the fall of 1947. If these findings can be held true for the United States as a whole, there was at that time a diabetic population ranging between 1,960,000 and 2,380,000, and of these roughly one million had never been diagnosed and were therefore unaware that they had diabetes.[3]

D. History

Concurrent symptoms characteristic of diabetes as we know them today were described long before the time of Christ. Nevertheless, knowledge of the pathology of diabetes is relatively new. The first discovery of the cells of the pancreas was made by Paul Langerhans in 1889. These cells now bear his name. Langerhans, however, did not recognize the function of these cells

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2 Lilly Research Laboratories, Diabetes Mellitus, Indianapolis, (1951), 19.

3 Herbert Yahraes, Good News About Diabetes, Public Affairs Committee, Incorporated, Public Affairs Pamphlet No. 138, New York, 1948, 4-6.

or their association with the diabetic's disorders. In 1899, Oskar Minkowski removed the entire pancreas from a dog and the animal developed a severe case of diabetes. After a few weeks it died of diabetic coma. Minkowski's experiment was the first successful attempt to produce diabetes in any species deliberately. As a result, investigators focused their attention on the pancreas. Subsequently the theory was evolved that a qualitative or quantitative deficiency of insulin was the important factor in the development of diabetes. Eugene Opie, in 1900, noticed that in the pancreatic section of a child who had died while in a diabetic coma the island of Langerhans cells were so degenerated they were difficult to identify. This led to the next advance in knowledge of diabetes which was in 1916 when Sir Edward Schafer postulated a theory that a hormone essential to the metabolism of carbohydrates was secreted in the islands of Langerhans. Not until 1921 was this secretion, insulin, isolated. Banting and Best are credited with efforts largely responsible for the isolation of insulin.[4] One of the milestones in the history of medicine has been said to be the discovery of insulin because it not only revolutionized the clinical treatment of diabetes, but also was the first potent weapon against the disease. Diabetes is now considered a major chronic disease of middle and later life. The diabetic's life has been greatly extended by the use of insulin;

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4 Tangney, Diabetes, 22-23.

also, it has opened the way for him to live a relatively healthy and active existence.[5]

E. Cause and Predisposing Factors

An insufficient amount of endogenous insulin is regarded as the immediate cause of diabetes mellitus. Research as to the cause of diabetes mellitus has revealed certain important predisposing factors.

An individual can inherit a predisposition to diabetes as a mendelian recessive character. This is an important fact for diabetics to consider when they face the question of marriage.

It has not been established how obesity predisposes to diabetes, but it has been established that it does. Research has revealed that the greater the obesity, the greater the possibility of developing diabetes.

Endocrine factors also play a part in the predisposition toward developing diabetes. This was proved by Houssay through his discovery of the close interrelationship between the pituitary gland the metabolism of carbohydrates. The adrenals and thyroid have also been shown to be in close relationship with the pancreas, indicating a significant complicating factor.

Some miscellaneous factors which rarely cause diabetes

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5 Metropolitan Life Insurance Company, Statistical Bulletin, Vol. XXVII, A Quarter-Century of Insulin, New York, 1946, 8.

but which occasionally seem to foster the onset of diabetes are infection, especially of the region of the gall bladder; injury to special areas of the midbrain as a result of disease; and, infrequently, arteriosclerosis. Unless there is avulsion or destruction of a significantly large area of the pancreas, traumatic diabetes is practically nonexistent. Diabetes may develop at any age; however, it is found more often in people past middle age, and most commonly in females. Studies of the factor of race have disclosed a greater incidence of the disease among Hebrews than among Gentiles; more incidence among Negroes than formerly suspected; and infrequent occurrence of the disease among the Chinese and Japanese, both of which have relatively mild cases of diabetes. Studies by Himsworth brought out the fact that diets of persons developing diabetes differed from those of normal persons in that they were higher in fat content and lower in carbohydrates.[6]

F. Symptoms

Usually the exact time of the onset of diabetes is indefinite, and the onset, itself, is insidious. The passing of large amounts of urine, increased thirst, and loss of weight and strength in spite of excessive appetite, are the most typical symptoms. The first symptom listed, polyuria, is usually first

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6 Lilly Research Laboratories, Diabetes Mellitus, 21-23.

noticed by the patient. Polydipsia, the second symptom listed, is generally noticed next. Polyphagia (excessive hunger) usually follows because the body is deprived of food values of the sugar lost in the urine, and also because the fat taken in by the body is imperfectly utilized. Other complaints commonly appearing are such skin disturbances as localized or generalized pruritus, furuncles, carbuncles, ulcers which heal slowly, disturbances in vision, numbness and tingling, and neuritis in the lower limbs predominently. Diacetic acid may be present in the urine indicating a condition known as acidosis. If the blood is examined, it may show a sugar content above normal after the patient has eaten a meal. Sometimes diabetes cannot be ascertained without an active search because the symptoms may be very mild.[7] Sometimes serious physical changes may take place without a show of typical symptoms.[8]

G. Diagnosis

Generally, the diagnosis of diabetes is easily established. If examination of the urine reveals the presence of sugar, this is presumptive evidence of diabetes. Sometimes the diagnosis is difficult as glycosuria may be present without other symptoms.[9]

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7 Lilly Research Laboratories, Diabetes Mellitus, 23-24.

8 American Diabetes Association, Incorporated, Diabetes Guide Book for the Physician, E. R. Squibb and Sons (1950), 12.

9 Lilly Research Laboratories, Diabetes Mellitus, 24.

Glycosuria may exist temporarily for a few hours during or following anesthesia, after shock, accidents, injuries (especially to the head, or following fractures that are severe. Since a diagnosis of diabetes means that there will be lifelong treatment involved for the patient, an evaluation of complete evidence in the individual case should be the basis of the diagnosis.[10]

In making a diagnosis, urine specimens passed within two hours following a hearty meal are the most valuable as 95 per cent of the cases of diabetes show in this instance. An examination of the urine after a meal of meat, potato, three slices of bread, and apple pie with coffee and sugar is an easy way to arrive at a diagnosis of diabetes. If the person is free of diabetes, there should be no sugar in the urine before this meal and at one hour and two hour periods after the meal. Testing of specimens of urine during a twenty-four hour period will usually reveal all cases of diabetes except where the disease is associated with what is medically termed as an elevation of the renal threshold for sugar. If this is the case, diabetes mellitus may be present yet glycosuria is not, and only a blood sugar test will establish the diagnosis. Also, if the renal threshold is reduced, glycosuria will be present in spite of the blood sugar remaining within normal limits. If, in any case, glycosuria is found, the urine should be examined for diacetic acid. If diacetic acid is

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10 Lilly Research Laboratories, Diabetes Mellitus, 24.

found, the resulting condition, acidosis, plays an important role in the therapy planned for the patient.[11]

Other tests used are known as tolerance tests, testing by oral medication, and the intravenous method of testing with the use of dextrose.[12]

H. Treatment

Several measures are used in the treatment of diabetes, namely: insulin, diet, exercise, and general care.[13]

In order to use insulin safely, economically, and rationally, there must be established a balance between the food requirements and the dose of insulin. Fundamental, simple dietetic principles underly this method of treatment. When the method was first used the diets were drastically restricted. As time went on the diets became more liberal. Today the diabetic diet is not materially different in nutritional adequacy from the normal person's diet. The insulin helps the patient to utilize the carbohydrates and fats he consumes.[14] There are four types of insulin currently used and needed because of the difference in the time it takes for them to be effective. These types can be broadly

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11 Lilly Research Laboratories, Diabetes Mellitus, 24.

12 Ibid., 25, 26.

13 Garfield G. Duncan, Diabetes Mellitus and Obesity, Philadelphia, 1935, 61.

14 Lilly Research Laboratories, Diabetes Mellitus, Foreword, 13, 20, 46.

classified as slow acting and rapid-acting insulin. The value of slow-acting insulin is that since it is liberated more slowly from the tissues, a lesser number of doses is required and the patient therefore is free of the discomfort and inconvenience of taking more frequent doses. Protamine zinc insulin and Globin zinc insulin are regarded as slow-acting. If it is necessary to get the patient's condition regulated during twenty-four hour periods, rapid-acting insulin such as regular insulin or crystalline zinc insulin are used.[15]

A more recent labeling of insulin lists the following: unmodified insulin; protamine zinc insulin; and NPH insulin, a recent discovery which offers some of the advantages and eliminates some of the disadvantages of the very short as well as the very long-acting preparations of insulin. The effect of insulin ordinarily lasts for five or six hours or more; however, the NPH insulin may be effective over a period of twenty-eight to thirty hours.[16] To take insulin the patient needs absorbent cotton, alcohol, an approved insulin syringe, and no less than two rustless needles. First, the hands should be washed well. Next, the syringe and needle should be sterilized by boiling five minutes before the plunger, syringe and needle are fitted together. Following this, the rubber cap on the insulin bottle should be

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15 Tangney, Diabetes, 61-65.

16 Lilly Research Laboratories, Diabetes Mellitus, 46-51.

wiped with alcohol soaked cotton. Then the plunger is set at the mark on the syringe showing the dosage prescribed by the physician, the needle is pushed through the rubber cap of the bottle and the bottle turned upside down. The plunger is then pulled back to the mark showing dose and pushed until air bubbles are out of the syringe. With alcohol soaked cotton at the site of the injection the patient next wipes the site of the injection, stretches the skin tight (or he may pinch it up with fingers spread at least three inches apart) and puts the needle under the skin quickly. The plunger should be pulled back so he can be sure a blood vessel hasn't been entered. This will be indicated if any blood shows, and if this is the case a new site must be chosen. In making the injection, the plunger is pressed down slowly as far as it will go. Before pulling out the needle, the spot where it enters the skin should be pressed lightly with alcohol soaked cotton. When the injection is completed, the syringe should be taken apart and rinsed with needle in clean water. Sites of injection, which are on the thighs, abdomen, and arms, should be changed frequently.[17]

It has been said that insulin should be subordinate to diet.[18] The determination of food requirements for the diabetic

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17 Herbert Pollack, M.D., Technique of Insulin Administration from Modern Diabetic Care, United States of America (1940) cited by Squibb Co., A Handbook for Diabetics, U.S.A., 1949, 6-13.

18 Tangney, Diabetes, 65.

is based on several factors such as age, weight, height, sex, amount of exercise, and the patient's general condition. The physician may find it necessary to change the diet prescription according to the patient's gain or loss in weight, illness, infections, or other conditions. In general, the diabetic diet, aside from being palatable in quality and quantity must offer the correct caloric requirements the patient needs, containing, therefore, the proper amounts of carbohydrates, proteins and fats. In addition it must meet the long-time nutritional needs of the patient for vitamins, minerals, and salts. The services of a dietician eliminates the need for the physician to convert the diet prescription into a menu. The patient will need to know how to measure the amounts of food described in the menus.[19]

Exercise plays a part in the treatment of diabetes by helping to keep the amount of sugar in the patient's blood normal and by aiding to regulate weight.[20] Benefits of general care are obvious.

I. Complications

Complicating conditions arise in the diabetic patient if treatment is inconsistently followed, improperly followed, or neglected.

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19 Lilly Research Laboratories, Diabetes Mellitus, 30, 38, 103.

20 Yahraes, Good News About Diabetes, 15.

Diabetic coma can result from prolonged acidosis. If not immediately treated diabetic coma may lead finally to death.[21]

A condition known as hypoglycemia results when the blood sugar falls below the level where it should normally be. If the patient has one of several types of heart disease, especially angina pectoris or coronary sclerosis, hypoglycemia is additionally serious because it interferes with the adequacy of the supply of sugar to the heart muscle.[22]

It is important to prevent a condition known as an insulin reaction.[23] An insulin reaction results if too much insulin is taken, if too little is eaten, if there is a long period before a meal after insulin has been taken, if the patient has indigestion or diarrhea, or if he exercises or works more than usual. The patient feels faint, dizzy, nervous, weak, may sweat, "see double", be sick at the stomach or have a headache. To get relief before the doctor arrives, the patient can take fruit juice, corn syrup, candy, sugar, sweetened coffee or tea, or ginger ale. A little later he can take some solid food or a glass of milk.[24]

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21 Lilly Research Laboratories, Diabetes Mellitus, 18, 19.

22 Ibid., 62.

23 Ibid., 65.

24 Pollack, Technique of Insulin Administration, from A Handbook for Diabetics, 14, 15.

If the diabetic develops arteriosclerosis, the mortality possibilities are increased as gangrene can be a direct result of arteriosclorosis especially where the extremities are concerned.[25]

Infections have a serious effect in diabetes. In the presence of infection a mild diabetic becomes a severe diabetic.[26]

Diabetics have been found to be susceptible to tuberculosis. Those most susceptible are patients who have had diabetes a long time, those whose diabetes is poorly controlled, and those who have recently recovered from a diabetic coma.[27]

In the matter of pregnancy, it has been found that abortions occur in diabetic mothers three times as frequently as in normal mothers, and stillbirths three to six times as frequently.[28]

The development of visual disturbances (retinal degenerative changes) can be prevented for an indefinite number of years, and rests on the degree of dietary control.[29]

Psychological problems sometimes enter as a complication in diabetes, possibly due to the routines and discomfort in some

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25 Lilly Research Laboratories, Diabetes Mellitus, 77.

26 Ibid.

27 Ibid., 89.

28 Ibid., 92.

29 James W. Sherrill, M.D., "Diabetic Retinitis; The Relationship Between Retinal Degenerative Changes and The Degree of Diabetic Control", Scripps Metabolic Clinic Bulletin II, A. Jolla, California, II, October, 1951, 1.

instances of the injections, urinalyses, and need to adhere strictly to a diet. The psychological problems are given impetus by coddling, over protection, or rejection by the persons with whom the diabetic comes in contact. He can be frightened by insensitive or hurried physicians. A wise doctor and associates who are understanding will help the diabetic keep as bright and normal an attitude as possible.[30]

Recently it has been disclosed by clinical observation that young adult diabetics whose disease began in childhood develop severe vascular degenerations.[31]

J. Prognosis and Prevention

Writing in 1947, Mary E. Tangney stated that diabetes ranked seventh as a cause of death in the United States but pointed out that this reflects several things: a structural change in the longevity of the population, improved diagnostic facilities, better education of the public, and the classifying of joint causes of death arbitrarily.[32] Dr. Elliot P. Joslin said in a lecture to diabetic patients attending the George F. Baker Clinic of the New England Deaconess Hospital, Boston, the average ten year old diabetic can expect to see age fifty-five;

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30 Yahraes, Good News About Diabetes, 15.

31 Metropolitan Life Insurance Company, Statistical Bulletin, Vol. XXX, Recent Trends in Diabetes, New York, April, 1949.

32 Tangney, Diabetes, 51.

the thirty year old, age sixty or more; the fifty year old, age sixty-six; and the diabetic at sixty can expect to live ten and six-tenths years longer.[33]

The complexity of the disease is shown by recent studies which indicate that the pancreas may produce enough insulin, but the body may not be able to properly utilize it.[34]

The control of diabetes can become more simple, more convenient, and more effective through early diagnosis and careful adherence to the prescribed treatment.[35]

In the light of all of the above information some methods of prevention of the disease can be used. These mainly include the avoidance of obesity and transmission of the disease by marrying a non-diabetic member of a non-diabetic family.[36]

K. Summary

The disease, diabetes, and the general implications it presents have been discussed in this chapter.

It was indicated that some knowledge of the disease and its implications is necessary to more adequately estimate the employed diabetic's total adjustment to his illness.

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33 Yahraes, Good News About Diabetes, 2.

34 Ibid., 2-3.

35 American Diabetes Association, Inc., Diabetes Guide Book, 9.

36 Elliott P. Joslin, Treatment of Diabetes Mellitus, Philadelphia, 1940, 87, 88.

Accordingly, the disease was defined at length and its increasing prevalence pointed out. The information on the history of the disease revealed that its symptoms were described before the time of Christ, but knowledge of the pathology is relatively new. The cause of the disease was given as an insufficient amount of endogenous insulin, and the predisposing factors were next reviewed and ennumerated as heredity, obesity and endocrinefactors. Miscellaneous factors which are rarely a cause, but which seem to foster the onset of diabetes were listed as infection, midbrain injuries, due to disease, arteriosclerosis, and, rarely, traumatic diabetes. Also included among these were age, sex, race and diet.

The symptoms were described as insidious and as generally consisting of polyuria, polydipsia, and polyphagia. Although the diagnosis is usually easy it was shown that it can be difficult due to mild, or elusive symptoms.

Treatment and complications described were given in detail. The several measures currently used were given as insulin, diet, exercise and general care. Complicating conditions, as pointed up, were diabetic coma, hypoglycemia, insulin reaction, arteriosclerosis, infections, tuberculosis, pregnancy, retinal degenerative changes and psychological problems.

Although it was indicated that diabetes will increase due to increased longevity of the population, it was shown that the life expectancy for diabetics is improving. It was also brought out that the complexity of the disease does not allow for

rapid strides towards its prevention.

Control of the disease was stated as being effective through early diagnosis and careful adherence to the treatment prescribed.

Methods of prevention are few to date. These were given as avoidance of obesity and avoidance of transmission of the disease by choosing as a mate a non-diabetic member of a non-diabetic family.

CHAPTER III

DESCRIPTION OF THE STUDY GROUP

A. Purpose of the Description

It is recognized that consideration of background factors is important in evaluating an individual's adjustment to his situation. Certain aspects of the personal and social data of the seventeen patients in the study group are, therefore, presented in this chapter.

B. Descriptive Study

Length of Time Under Clinic Supervision

The diabetic patient must have appreciation of the need for periodical medical supervision. Knowledge of the length of time the diabetic patient has been under supervision makes possible a more adequate evaluation of his total adjustment. Examination of the length of time the seventeen employed diabetics were known to the Diabetic Clinic as of October 31, 1951, revealed that five were known two to two and one-half years; four were known a year to eighteen months; four had been coming to the clinic for eighteen months to two years; two had attended two and one-half to three years; and of the two that were known to the clinic between five and five and one-half years, one had attended exactly

five years, and the other five years and five months. Table II shows these facts graphically.

TABLE II

LENGTH OF TIME SEVENTEEN EMPLOYED DIABETICS WERE KNOWN TO MERCY DIABETIC CLINIC

Time	Frequency
Total 17	
1 year to 18 months	4
18 months to 2 years	4
2 years to 2½ years	5
2½ years to 3 years	2
3 years to 3½ years	0
3½ years to 4 years	0
4 years to 4½ years	0
4½ years to 5 years	0
5 years to 5½ years	2

Sex

Medical research has determined that diabetes occurs more frequently in women than in men.[1] Thus the sex distribution in as small a group as seventeen was noted with interest. Of the seventeen patients studied, eight were women, nine were men.

Birthplace and Command of English

To successfully adjust to his condition, the diabetic must be educated in the fundamentals of his illness. This implies that he must be capable of understanding and benefiting by the instruction and training given him relative to the care of his

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1 Tangney, Diabetes, 2.

illness. With these factors in mind, the place of birth and command of English of the seventeen patients was considered. Fourteen of the patients were American born, three foreign born, and all had adequate command and understanding of English.

Inasmuch as diabetes has been determined to be a disease of middle and old age, coming on between the ages of forty and sixty,[2] it was of interest to note that five persons of the study group were in the age range of forty to fifty, and five others in the range of fifty-five to sixty-five. The ages of the seventeen patients ranged from twenty-six to sixty-four and the table which follows illustrates the distribution of the seventeen patients according to age.

TABLE III

AGES OF SEVENTEEN EMPLOYED DIABETICS
OF MERCY DIABETIC CLINIC

Ages	Frequency
Total 17	
25 to 30	4
30 to 35	1
35 to 40	2
40 to 45	2
45 to 50	3
50 to 55	0
55 to 60	2
60 to 65	3

2 Metropolitan Life Insurance Company, Diabetes, Circular, United States of America, October, 1950, 3.

Marital Status

It can be assumed that substantial gains or losses can take place in the patient's adjustment to his illness due to the influence of a spouse. The influence may be of a positive or a negative nature. If positive, much can be gained by the patient in such areas as actual help with the mechanics related to the care of the disease, improved attitudes toward limitations faced, and attainment of the maximum goals possible in his medical and social adjustment. Seven of the study group were married; six were separated; three were single; and one was widowed.

Living Arrangements

Living arrangements can be conceded as significantly affecting social situations and would, therefore, be especially related to the adjustment of a person who is coping with an illness. It was found that the largest number of patients in the study group were housed in one-room apartments. Only one patient had six rooms, which was the maximum number of rooms listed as living quarters. Of the six patients who lived in one-room apartments, four lived alone and two shared their room with one other person. The largest number of persons exclusive of the patient in a household was six, and this was in the case of one patient only, who had five-room living quarters. Table IV shows the distribution of the seventeen patients according to the number of rooms occupied.

TABLE IV

HOUSING OF THE SEVENTEEN EMPLOYED DIABETICS

Rooms	Frequency
Total 17	
1	6
2	1
3	1
4	5
5	3
6	1

The number of persons sharing facilities in a home and being in fairly regular contact with one another generally poses problems of adjustment for one who is ill. Especially is this possible in the case of the diabetic who could become involved in mechanical problems concerned with the use of housing facilities, as well as in emotional problems related to interpersonal relationships and attitudes. The number of persons other than the patient in the households is shown in Table V.

TABLE V

MEMBERS OTHER THAN PATIENT IN HOUSEHOLD

Members	Frequency
Total 17	
None	5
One	6
Two	2
Three	2
Four	0
Five	1
Six	1

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Dependents

The number of persons dependent upon the patient for financial support was given attention because the ability to assume responsibility for one's dependents is one of the positive factors for a diabetic patient, and the inability to do so can easily be a negative and disturbing factor. The relationship of the dependents can be seen in Table VI which shows that most of the patients did not have dependents; four had spouses as dependents; two had relatives outside the immediate family as dependents; one had a child as a dependent; one was responsible for the support of a wife and child, and one had a mother as a dependent. Table VI illustrates the type of dependents had by the seventeen patients in the study group.

TABLE VI

TYPE OF DEPENDENTS OF THE SEVENTEEN EMPLOYED DIABETICS

Relationship	Frequency
Total 17	
Father	0
Mother	1
Sister	0
Brother	0
Spouse	4
Spouse and Child	1
Child	1
Other relatives	2
Non-relatives	0
No dependents	8

Income Other Than Wages

Some of the seventeen patients in the study group had income other than wages, which was helpful where dependents were concerned. Ten of the seventeen patients had no income other than wages; one had additional income from a roomer, one had other income because of a pension received; two were getting supplementary income from a welfare agency; employed spouses provided additional income in the case of two patients; and one had income in addition to wages from household members who were relatives, but not of the immediate family group. Table VII depicts the relationship between the number of dependents and the sources of income for the seventeen employed diabetics used in this study.

TABLE VII

RESOURCES FOR THE SUPPORT OF DEPENDENTS OF THE SEVENTEEN EMPLOYED DIABETICS

Dependents	Number with Income Other Than Wages	Number With No Income Other Than Wages	
Total	7	10	17
No dependents	3	5	
1 dependent	2	4	
2 dependents	1	0	
3 dependents	0	1	
4 dependents	0	0	
5 dependents	1	0	

Type of Employment

Dr. Louis I. Dublin and Herbert H. Marks state that "the great majority of those who are under reasonably good medical care can carry on their jobs as well as non-diabetics, and as well as they did before the onset of the disease."[3] This conclusion, coupled with the fact that the ability to accept employment is one of the major positives in a patient's situation, made the examination of the employment of the patients in the study group expedient. Through examination of their employment it was found that six of the seventeen employed diabetics were in occupations classified as semi-skilled; five had occupations classified as service; three were engaged in skilled occupations; and three in unskilled occupations. None had employment in the professional and managerial or clerical and sales fields. This distribution might be expected in a group seeking clinic care for their illness. In the study group the occupations represented in the semi-skilled classification were: novelty salesman, two power machine operators, a shoe repairman, a meat packer, and a slip-cover cutter. The service classification consisted of work as follows: maid service, watchman, busboy, public health laboratory helper, and general house cleaner. Skilled occupations in the group were clerk in the United States Treasury Department, spray painter,

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3 Louis I. Dublin, Ph.D. and Herbert H. Marks, "The Diabetic in Industry and His Employer", Industrial Medicine and Surgery, XIX, 6, June, 1950, 279-282.

and machine factory assembly line work. The three unskilled occupations were: neon sign installation helper, office supply room helper, and self-employment door to door small item selling on a commission basis. In Table VIII the distribution of the seventeen patients according to occupational classifications is shown.

TABLE VIII

DISTRIBUTION OF THE SEVENTEEN EMPLOYED DIABETICS ACCORDING TO OCCUPATIONAL CLASSIFICATIONS

Occupational Classification	Frequency
Total	17
Professional and Managerial	0
Clerical and Sales	0
Skilled	3
Semi-skilled	6
Unskilled	3
Service	5

Educational Background

Two reasons for noting the formal educational background of the patients in the study group are that the patient's schooling affects not only his capacity for becoming educated in the fundamentals of his illness, but also, as a general rule, the type of occupation he engages in. As shown in Table IX, four of the patients had a fifth grade education; one completed the sixth grade; one the seventh grade; one the eighth grade; three had completed one year in high school; three finished two years of high school work; one completed three years of high school work; two had the full four years of high school training; and one completed

one year of college work.

TABLE IX

FORMAL EDUCATION OF THE SEVENTEEN EMPLOYED DIABETICS

Formal Education	Frequency
Total 17	
Below 5th grade	0
5th Grade	4
6th Grade	1
7th Grade	1
8th Grade	1
One year high school	3
Two years high school	3
Three years high school	1
Four years high school	2
One year college	1
Over one year college	0

Experiences with Health Problems Other than Diabetes

Health problems other than diabetes which the diabetic or members of his family may have, with which the diabetic is dealing or has had to deal, are significant in that they indicate some of the adjustments the individual has had to make relative to other illnesses. Such problems show his experience with medical care and denote possible implications relative to the effect of other illnesses on the diabetes, or the effect of the diabetes on the other illnesses. For these reasons some knowledge was sought of the health problems of the patient and his family which might influence the patient's adjustment to his present illness, diabetes. In connection with these factors it was found that out of the seventeen patients in the study group one had experienced

family health problems with a spouse, seven with members of the immediate family other than spouse; four with spouse and other members of the immediate family; and five had not had experience with health problems of any family member. This information is further described in Table X.

TABLE X

FAMILY HEALTH PROBLEMS EXPERIENCED BY THE SEVENTEEN EMPLOYED DIABETICS

Family Members	Frequency
Total 17	
Spouse	1
Members of immediate family other than spouse	7
Spouse and other members of immediate family	4
No health problems of any family members other than patient	5

Thirteen of the patients in the study had at some time been able to pass a physical examination for insurance or a job, which was indicative of successful attainment of health standards to a certain degree. One patient had never been able to pass any required health examination. Three had not been so examined. Sixteen of the seventeen patients in the study group had had some previous medical care; one had not. None of the patients were receiving current medical care for ailments other than diabetes and were not planning such care, and indicated that they felt their

other ailments were under control. Concerning these other ailments it was found that they were chiefly lues, high blood pressure, gonorrhea, arthritis, arteriosclerosis, and heart trouble. Only two patients were ever diagnosed as obese and the diagnosis was made in 1950 for one patient and in 1951 for the other. Their weight was approaching a satisfactory point at the time of this study. Most of these other ailments were diagnosed within a period of the last five years, and at an earlier period, indicating in general a fairly long experience with health problems. Table XI further describes the span of years during which the seventeen patients had diagnoses of other ailments.

TABLE XI

TIME SPAN DURING WHICH THE SEVENTEEN EMPLOYED DIABETICS HAD OTHER AILMENTS DIAGNOSED

Time	Frequency
Total 17	
Within the past year only	3
Within the past five years	3
Over five years ago	3
Within the past five years and at an earlier period	8

C. Summary

In brief summarization of certain aspects of the personal and social data of the seventeen patients in the study group which were presented in this chapter, it can be stated that

most of the patients were known to the Mercy Diabetic Clinic two to two and one-half years and the group was almost evenly divided as to sex. The command and understanding of English and educational background of the patients seemed sufficient for their adequate training in the fundamentals of their illness. The age range of the group was fairly typical of the age groups generally faced with diabetes. The patients studied seemed to be coping with the usual problems found in the areas of marital adjustment, living arrangements, care of dependents, and personal and family health problems, and, although afflicted with a chronic illness, effected some adjustment to these problems by maintaining employment.

CHAPTER IV

THE SOCIO-MEDICAL ADJUSTMENT OF EMPLOYED DIABETICS RECEIVING CLINIC CARE

A. Coordination With Information Previously Presented

In the preceding chapters of this study there has been presented the significance, purpose, and setting of the study; a discussion of diabetes and its implications; and a description of the study group. The purpose of this chapter is to examine additional aspects of the social and medical adjustment of the study group.

B. Areas of Adjustment Previously Presented

Chapter III gave a description of such significant factors concerning these patients as their command of the language, housing, number of household members, number and type of dependents, type of employment, sources of income, educational background, and the health problems faced by the patient and his family.

C. Additional Areas of Adjustment Studied

The factors presented in this chapter which can offer additional indications of the patients' general social adjustment

are: veteran status; source of referral; social problems indicated; contact with Mercy Free Dispensary Social Service Department; contact with other organizations; impression of general behavior and stream of mental activity; and attitudes toward clinic experiences at Mercy Free Dispensary, toward over-all personal problem, and toward community activities. Some evidences of the patients' adjustment to illness are also studied, such as: use of stimulants, tobacco and drugs; diabetic clinic record; promptness in seeking professional medical care; attitudes toward routines of treatment, and knowledge of serious stage of illness. Some evidences of their adjustment to employment are considered: present salary; daily time spent on job; number of jobs in 1951; incidence of following usual life employment; job changes due to diabetes and related problems; and attitude toward current employment and related problems. The findings in all these areas are examined, summarized and correlated with some related studies and literature.

Veteran Status

Only three of the patients in the study group had ever been faced with the problem of adapting themselves to military life. Only one of these had veteran benefits as a source of income.

Sources of Referral

Some indication of the patients' resourcefulness in seeking help is shown by an examination of the sources of referral

to the Mercy Diabetic Clinic. The largest number of patients were either referred by Cook County Hospital, Chicago, Illinois, or came on their own initiative. One was referred by a friend; three by The Chicago Welfare Department; two by Veterans Administration; and one by Central Free Dispensary, Presbyterian Hospital, Chicago. Table XII illustrates this information.

TABLE XII

SOURCES OF REFERRALS OF THE SEVENTEEN EMPLOYED DIABETICS

Source	Frequency
Total 17	
Self	5
Friend	1
Chicago Welfare Department	3
Veterans Administration	2
Cook County Hospital	5
Central Free Dispensary	1

Social Problems

The social problems of the patients can cast some light on the kind of adjustment they are effecting. Ten of the patients were currently having personal social problems and also had been faced with such problems in the past. The problems these ten were currently or previously involved with fell in the categories of health, employment, financial need and mental disturbances. These problems will not be analyzed here inasmuch as the nature of the health problems these patients faced previous to the study was described in Chapter III; the health and employment problems

are to be analyzed when the patients' adjustment to his illness and to employment are discussed; financial need is self-explanatory in the light of the previously described economic status of the patients; and since only one patient was concerned with a mental problem, not current, which was a minor emotional upset not connected with diabetes. Five of the seventeen patients felt they had no current social problems, and none were indicated for them in clinic records. All five had faced health or financial need problems in the past, however. Two patients felt none of their past experiences had developed into problems and that diabetes of recent origin (within span of 1950-1951) was currently causing their first social problem. One felt that diabetes contributed to the problems of financial management, and the other had the problem of losing employment time to attend the clinic. Table XIII outlines these issues.

TABLE XIII

INCIDENCE OF SOCIAL PROBLEMS OF THE SEVENTEEN EMPLOYED DIABETICS

Incidence of Problems	Frequency
Total 17	
No current problems	5
Problems within past year only, and current problems	2
Current problems and past problems of over a year's duration	10

Contact with Clinic Social Service Department

The patients' general social adjustment would, in some instances, be indicated to a degree in the record of the patients' contact with the clinic social service department. Only four of the study group had ever been in contact with the Mercy Clinic Social Service Department. Three of these had only brief contact and the record material is insufficient for purposes of studying general adjustment. The other patient in this group had a long contact and the case continues to be carried in social service because of the lack of progress with the clinical treatment of his diabetes. The social service record of this patient shows poor adjustment to problems of financial need, employment, and health, over a considerable period of time.

Contact with Other Organizations

An examination of the contacts which the patients had with other organizations was made for further evidence of their general adjustment, since such contacts show the incidence of need for various kinds of aid. It was found that two of the patients had no contact with any other organizations relative to their social problems. One had contact with a social agency over a considerable period of time and was currently receiving partial financial assistance. He had also been known to another hospital. Seven other patients had been known to a social agency and another hospital in the past, and an additional seven had been known to a hospital, only, in the past. Ten of the patients had short term

(less than a year) contacts with a hospital or social agency, and five had long term contacts with these types of organizations. These facts are shown in Table XIV.

TABLE XIV

CONTACTS OF THE SEVENTEEN EMPLOYED DIABETICS WITH OTHER ORGANIZATIONS

Other Organizations	Frequency
Total 17	
None	2
Contact with Social Agency currently, and hospital previously	1
Previous contact with Social Agency and hospital	7
Previous contact with hospital only	7

Psychiatric Data

The general behavior, personality, and stream of mental activity was noted during personal interviews because these also would seem to offer some measure of an individual's general adjustment. Only two of the seventeen patients seemed to have unsatisfactory general behavior and personality. One of these was excitable and restless; the other was dull and apathetic. The general mental capacity appeared to be good in the case of eight patients, average in the case of six, and slow in the case of three.

Attitude Toward Clinic Experiences

Attitudes toward clinic experiences can be one index to

an individual's understanding of the clinic's functions, his capacity to use the services offered, and ability to adapt to situations arising in a clinic setting. Since it had been observed that most of the complaints from patients were in the areas of convenience (location and hours), the amount of time consumed in getting clinic service, and the service given, the patients were asked about these points relative to each department of the clinic with which they had sufficient contact to form an opinion. They were also given an opportunity to make any other comments they desired. As pointed out above, only four of the study group were ever known to the clinic Social Service Department. Two of these felt its convenience was adequate for them; not too much time was spent getting service; and the service offered was good. One of these four felt the clinic was fairly convenient, that time spent getting service was not too much, and the service given was fair. One of the four felt the clinic was convenient, that the time spent getting service was not unreasonable, and the service given was satisfactory. All of the patients expressed their attitude toward the diabetic clinic in the specific areas of inquiry, and ten made additional comments. Two said that this clinic was convenient, too much time was spent getting service, but that service was very good. Four expressed the opinion that the clinic was convenient, too much time was consumed getting service, and felt the service was good. Two said the convenience and time spent was satisfactory and service was satisfactory. One felt

that the clinic was convenient, too much time was consumed getting service, and service was only fair. Seven said that the clinic was convenient, the time spent getting service satisfactory, and of these seven, one felt service was very good, five felt service was good, and one felt it was fair. Finally, one patient felt the clinic was only fairly convenient because, although he had good transportation, he had a long ride to get there, and in addition, felt too much time was consumed getting service, and that service was fair. It can be seen, then, that all the patients felt the clinic was convenient but varied in their attitudes toward time consumed there and the service given. Tables XV and XVI show these varied attitudes.

TABLE XV

ATTITUDES OF THE SEVENTEEN EMPLOYED DIABETICS TOWARD TIME CONSUMED GETTING SERVICE IN DIABETIC CLINIC

Amount of Time Consumed	Frequency
Total 17	
Too much	8
Satisfactory	9

Only ten of the patients had additional comments to offer on areas outside the specific questions. These comments were as follows: four expressed the wish that the clinic was open on Saturdays so they would not miss pay for work hours lost to attend during the week. Two said they appreciated the fact that

TABLE XVI

ATTITUDE OF THE SEVENTEEN EMPLOYED DIABETICS TOWARD SERVICE RECEIVED IN DIABETIC CLINIC

Opinion of Service	Frequency
Total 17	
Fair	3
Satisfactory	2
Good	9
Very good	3

they were given preference in the matter of service and were served early. As a result they lost so little time from work that their employers made an adjustment and the lost time was not charged against them. One patient thought the method of giving instructions for following the diet and using insulin was more clearly given at the Veteran's Administration Hospital Clinic, but he was coming to Mercy Diabetic Clinic because he was referred by Veteran's Administration. Another patient wished the doctors had more time to listen to problems encountered in following the clinic instructions. This patient felt closer to the doctor than to the social worker with whom she had never been in contact. One patient expressed appreciation for all the clinic services, because comparable private service could not be paid for from the patient's earnings. One patient remarked that it was hard to obtain sympathy from clinic personnel relative to problems in following diet.

Conception of Over-all Problem

Patients were asked to give their idea of their over-all problem, whether or not it be in the area of illness. This question offered a further check on the patients' answer above in regard to social problems. Five patients, again, felt they had no over-all problem; three advised that their greatest problem was following their diet on the job; one felt it was following the diet in general, and mastering the mechanics of taking insulin; two felt the over-all problem was the cost of purchasing dietary foods, and then other foods for the family -- in other words, two sets of groceries; three presented their problem as simply the cost of dietary foods; one, the cost of dietary foods and the cost of insulin; one, the loss of pay from work on the day clinic is attended; and one, the use of will power in following diet. Table XVII below illustrates this information.

TABLE XVII

CONCEPTION OF OVER-ALL PROBLEM BY THE SEVENTEEN EMPLOYED DIABETICS

Problem	Frequency
Total 17	
None	5
Following diet on the job	3
Following diet and mastering mechanics of taking insulin	1
Cost of purchasing dietary and family foods	2
Cost of dietary foods	3
Cost of dietary foods and insulin	1
Loss of pay to attend clinic	1
Will power to follow diet	1

Community Interest

In order to get some indication of the patients' interest in group living outside of the home and family, the question concerning interest and membership in community organizations was asked. It was discovered that eleven of the patients expressed enjoyment of community organizations and six stated they did not enjoy such groups and did not belong to any groups in the community. Also, three of the eleven patients that enjoyed such groups did not belong to any; therefore, a total of nine were not participating in any organizations in the community. Of the eight who belonged to organizations, five belonged to churches, one to a church club, one was a girl scout worker and P.T.A. member; and one was a Y.M.C.A. member. Four of the nine not belonging to organizations gave as their reason that they were financially unable to belong to any. Two pointed out that their night employment made membership in organizations unfeasible. The reasons that three gave could be summed up with the statement that they did not feel physically able to participate due to fatigue after work and concern with care and treatment of diabetes. Table XVIII shows these reasons for non-participation in community groups.

Description of Adjustment to Illness

In evaluating the patient's adjustment to his illness, the use of stimulants, tobacco and drugs at the time of the study was examined because of the bearing this might have on the successful control of the diabetes. Concerning stimulants and

TABLE XVIII

REASONS GIVEN BY THE SEVENTEEN EMPLOYED DIABETICS FOR NOT PARTICIPATING IN COMMUNITY ORGANIZATIONS

Reasons	Frequency
Total 17	
Financially unable	4
Employed at night	2
Physically unable because of work fatigue and care and treatment of diabetes	3
Participating in community organizations	8

tobacco, it was revealed that only two patients did not use any kind of stimulants or tobacco. Four used only coffee, two used only tobacco. Combinations in the use of stimulants and tobacco were found as follows: one used tea and coffee; three used coffee and tobacco; one used alcohol and coffee; one used alcohol, tea and tobacco; one, tea and tobacco; one alcohol, coffee and tobacco; and one alcohol, tea and coffee. Reference to medications here applies to medications other than insulin. Ten of the patients were currently using some kind of medications and all said that these were types approved by clinic doctors. Seven of the patients were not using medications.

Diabetic Clinic Record

The diabetic clinic record was examined since it might be considered one of the fundamental sources of information on a patient's adjustment to his illness. No patient in the study

group made less than four visits to the clinic during the period of the study. Two people made four visits; two made five; three made six, three made seven; two made eight; one made nine, one made twelve; two made thirteen; and one made fifteen. Table XIX pictures this distribution.

TABLE XIX

DISTRIBUTION OF CLINIC VISITS MADE BY THE SEVENTEEN EMPLOYED DIABETICS

Number of Visits	Frequency
Total 17	
Less than four visits	0
Four visits	2
Five visits	2
Six visits	3
Seven visits	3
Eight visits	2
Nine visits	1
Ten visits	0
Eleven visits	0
Twelve visits	1
Thirteen visits	2
Fourteen visits	0
Fifteen visits	1

Urinalysis Reports

The urinalysis reports for these visits will be pointed out first. A satisfactory report, for purposes of this study, means the urine was sugar free. Of the two patients who made four visits, one had a satisfactory report for more than one-half of the visits, and one had satisfactory reports for all the visits. Both of the patients who made five visits had all satisfactory reports. Two of the patients who made six visits had all reports satisfactory; one had satisfactory reports for one-half of the visits. Of the three patients who made seven visits; one had all satisfactory reports and two had satisfactory reports for more than one-half of the visits. Both patients who made eight visits had satisfactory reports for more than one-half of the visits. The patient who made nine visits had satisfactory reports for more than one-half of the visits. The patient who made twelve visits had satisfactory reports for less than one-half of the visits. One of the two patients who made thirteen visits had satisfactory reports for less than one-half of these visits; the other had satisfactory reports for more than one-half of the visits. The patient who made fifteen visits had satisfactory reports for all of these visits. Thus it is seen that seven of the patients in the study group had satisfactory reports for all of the visits; seven had satisfactory reports for more than one-half of the visits; one for one-half of the visits; and two for less than one-half of the visits. These facts can be seen in Table XX.

TABLE XX

INCIDENCE OF SATISFACTORY URINALYSIS REPORTS ON VISITS MADE BY THE SEVENTEEN EMPLOYED DIABETICS

Number of Satisfactory Reports	Frequency
Total 17	
All	7
More than one-half	7
One-half	1
Less than one-half	2

It should be pointed out, however, that the urinalysis report was omitted on some visits, usually because the patient did not bring his urine specimen.

Reports on Diet

The diet reports on these visits do not present a conclusive picture because, generally, if the patient's weight and urinalysis were satisfactory, there was no contact with the dietician, and no entry was made on the record relative to diet. If the dietician contacted the patient, however, there appeared an entry in the record commenting on the patient's satisfactory or unsatisfactory adherence to his diet. It was noted that the largest number of unsatisfactory diet reports was four, and this was for the patient who made nine visits and had satisfactory urinalysis reports for more than half of these.

Use of Professional Medical Care

Most of the patients in the study group were prompt in seeking professional medical care after they discovered they had diabetes. Fourteen sought this care promptly during the same year as the diagnosis. However, one let a year lapse before seeking professional care; another two years, and one let four years lapse before getting professional medical care.

Attitudes Toward Diet and Insulin

The patient's attitude toward diet and insulin can be one clear indication of his adjustment to his illness. Nine of the patients in the study group said they liked the diet; four disliked it, and four were indifferent in the matter of diet. Nine felt that following a diet was a problem for them; eight felt it was no problem. When asked of their attitude toward the taking of insulin, ten patients were indifferent to it; two disliked it; one expressed a liking for it; and four did not have to use insulin. Of the thirteen who were using insulin, only three felt it was a problem to take.

Incidence of Serious Stage of Diabetes

The number of times the patient's diabetes has been at a serious stage is another guide in evaluating his adjustment to the disease. Eleven of the patients had never been informed that their diabetes was in a serious stage, and did not feel it had been. The six who had been so informed had only had this experience once. Two patients had been told in 1948, one in 1949, two

in 1950 and one in 1951.

Description of Adjustment to Employment

Evidences of the patient's adjustment to employment were examined although the only obtainable evidence was that which was gotten from the patient. The information given was unverified by contact with employers or other persons concerned because it was felt the patients would be desirous of giving accurate information due to their personal interest in their adjustment.

Salaries

The type of jobs held by the patients in the study group was described in the preceding chapter. Attention is now given to the monthly salaries on which the patients were managing. These ranged from $30 a month to $350 a month. The one patient who earned $30 a month had supplementary assistance from a social agency. The highest salary in the group, $350 a month, was earned by only one patient. Table XXI depicts the salary range.

TABLE XXI

MONTHLY SALARY RANGE OF THE SEVENTEEN EMPLOYED DIABETICS

Amounts	Frequency
Total 17	
Below $50	1
$50 to $100	4
$100 to $150	5
$150 to $200	4
$200 to $250	2
$250 to $300	0
$300 to $350	0
$350 to $400	1

Daily Time on Job

The daily amount of time spent on the job was considered as further evidence of ability to adjust to employment. Fourteen of the patients were employed full time, and three part time.

Number of Jobs Held

The number of jobs held in 1951 during the period of the study was ascertained in order to point up recent stability or instability in job holding. Fifteen patients had had only one job during this period. Two had made changes and had worked on two jobs in 1951.

Incidence of Following Usual Life's Work

Whether or not the diabetic patient has been able to so adapt himself to his illness that he could continue in his usual life's work would seem to be a fundamental point in evaluating his adjustment to employment. Twelve of the persons in the study group were following their usual employment; five were not. Only three had left their usual employment because of diabetes, however. Of these, one had previously been a cook earning $200 a month and had to leave due to the speed and pressure on the job, which allowed no time for preparation of dietary foods. This patient, therefore, took a job as a general maid or attendant in a hospital at wages of $85 a month. The next of these three had been a foreman in a factory some years ago when $150 was accepted as a fairly good salary for this work. Because of the fact that

he began to have periods of stupor due to diabetic complications he had to quit this job. He took up the work of night watchman, current monthly salary $130, because of the amount of time this job allowed him for the care and treatment of his diabetes. The third patient had always done house work by the day outside of her own home at a monthly salary of $80. After it became necessary for her to adhere to the routines of the care and treatment of diabetes the patient found it more expedient to leave this work because it was heavy, consisted of long hours, and no provisions were made for the patient to have adequate or dietary meals. Therefore the patient took up door to door sales of small items on a commission basis, averaging $100 a month. This allowed her time for following diabetic care and treatment routines.

It was noted that none of the patients in the study group were ever asked to leave a job because of diabetes.

Attitudes Toward Current Employment

The patient's attitude toward his current employment was ascertained on the questions of whether or not he was satisfied doing his present work or if he desired a change, the nature of the preferred work, and reasons for each expressed attitude. These attitudes were given consideration because it would seem that they would offer additional clarification on the question of the patient's adjustment to employment. Eleven of the patients in the study group were satisfied with their present employment and did not desire a change. Six of the patients felt that some

TABLE XXII

ATTITUDES OF THE SEVENTEEN EMPLOYED DIABETICS TOWARD CURRENT EMPLOYMENT

Attitude		Reasons	Job Preference	Frequency
Change Desired	No Change Desired			Total 17
	x	Hot dietary meals available on job	None	2
x		Must accept poor meals given on job	Factory Assembly	1
	x	Work light, salary satisfying	None	1
x		Hours are tiring	Light part-time work	1
	x	Able to eat meals at home	None	2
x		Work is strenuous	Policeman	1
x		Must accept poor meals given on job	Busboy with choice of meals	1
x		Difficult to follow diet on job	Night work	1
	x	Can heat foods on job	None	2
	x	Employer is cooperative with meal problems	None	2
	x	Good all around adjustment on job	None	2
x		Work is strenuous	Light night work	1

type of employment other than that which they had would be more satisfactory. Most of the reasons given for not wanting or wanting a change were concerned with the problem of meals or following a diet. These findings are shown in Table XXII, above.

Incidence of Diabetic Reactions on the Job

The incidence of diabetic reactions on the job was studied as it would appear to be a problem related to the

diabetic's adjustment to employment in the light of all of the above discussion and the information given about diabetes in Chapter II. Ten of the patients in the study group had had diabetic reactions on either their past or present jobs. Of these, seven had had reactions on their present jobs, and three on past jobs. Seven of the patients had never had a diabetic reaction while on a job. According to the statements of the ten patients who had diabetic reactions on the job, the reaction affected most of them by making them dizzy; the reactions subsided in the majority of cases when the patient rested or worked slower for a time; there were no serious consequences; and the attitude of other employees and the employer was generally sympathetic and helpful. In Table XXIII, page 63, circumstances of the diabetic reactions the patients experienced on the job are described.

Arrangements for Meals and Insulin on the Job

The arrangements for eating and taking insulin on the job and at home were considered as related problems in the question of adjustment to employment for the reason outlined in the preceding paragraph. Among the patients in the study group, two had jobs that allowed them to eat all meals at home; thirteen ate one meal on the job; and two ate two meals on the job. Fifteen, then, ate on the job. Of these, eight brought their food from home, and seven purchased their meals on the job. In the cases of the eight who carried meals from home, it was found that five prepared the meals themselves and wives prepared the meals for

TABLE XXIII

CIRCUMSTANCES OF DIABETIC REACTIONS ON THE JOB EXPERIENCED BY THE SEVENTEEN EMPLOYED DIABETICS

Activity At Onset	Resulting Condition	Attempts to Counteract Reaction	Employees' Attitude	Employer's Attitude	Frequency Total 17
Factory assembly work	Dizziness	None	Did not notice patient	Did not notice patient	1
Scrubbing	Dizziness and nausea	Drank lemonade, kept on job	Did not notice patient	Did not notice patient	1
Washing glass in lab.	Flashes of blindness	Rested	Sympathetic	Helpful	1
At shoe repair machine	Fainted	Rested	Sympathetic	Helpful	1
Running Power machine	Numbness in hands and arms	Drank milk	Helpful	Sympathetic	1
Sorting office supplies	Clouded vision, dizziness	Worked slower	Did not notice patient	Helpful	1
Collecting dishes restaurant	Confusion, and dizziness	Ate some sugar	Surprise	Suspicious thought he was dope user	1
On ladder hanging neon sign	Weakness, dizziness	Rested, ate candy	Anxious and worried	Helpful	1
At watchman post	Weakness, semi-consciousness	Rested	Helpful	Condition not known to empl'r.	1
Preparing restaurant food order	Dizziness	Rested	Helpful	Helpful	1
No reaction on present or past jobs					7

the other patients. Two of the patients who prepared meals to take on the job themselves said the meals conformed to diet requirements poorly, due to some of the over-all problems pointed out earlier in this chapter; one reported that the meal prepared conformed fairly well to diet requirements; and two advised that the meals they prepared conformed to diet requirements. Two of the wives prepared meals which the patients reported conformed fairly well with diet requirements; one patient reported that his wife prepared a meal which conformed to diet requirements. Five of the seven who purchased meals on the job said these meals conformed to diet requirements, and two said their meals conformed poorly to diet needs. Table XXIV illustrates this information.

TABLE XXIV

CONFORMATION TO DIET OF MEALS TAKEN FROM HOME BY THE SEVENTEEN EMPLOYED DIABETICS

Person Preparing Meals Taken to Job	Conformation to Diet			Frequency
	Good	Fair	Poor	Total 17
Self	2	1	2	5
Wife	1	2		3
Meals Purchased	5		2	7
No meals on job				2

Only one patient had to take insulin on the job. This patient went to his automobile once each working day to take his insulin.

Home Arrangements for Meals and Taking Insulin

Knowledge of eating habits and the taking of insulin as practiced in the home was obtained as follows: Sixteen patients reported their eating habits at home were regular. One reported home eating habits were irregular because of a poor appetite and no desire to eat at regular meal hours.

Conformation of Meal to Diet

Fifteen commented that generally their meals at home conformed to dietary requirements. Two felt that most of their meals conformed poorly to diet requirements. One of these two gave as a reason for this that he had a poor appetite; the other, that his wife did not prepare his meals most of the time according to diet requirements and regulations. Eleven of the patients prepared their meals at home themselves; the meals for five were prepared by wives; and meals for one were prepared by either his mother or his sister.

Home Use of Insulin

A total of thirteen of the seventeen patients in the study used insulin. Only one had to use it on the job, as shown above. Four had their diabetes under control without the use of insulin. The thirteen who used insulin advised they followed the instructions and routine given them by the clinic doctor. Twelve of them administered insulin at home to themselves without assistance; one was assisted by his wife in administering insulin at home.

D. Summary

Information in this chapter has centered around the social and medical adjustment of the patients in the study group.

In the matter of general social adjustment it was revealed that most of the patients were referred by Cook County Hospital. It was found that ten of the patients were facing current problems falling in the categories of health, employment and financial need; only four had contact with Mercy Social Service Department; which is a much smaller per cent than for the total clinic. This could indicate the employed diabetics' tendency toward independent planning. Fifteen were known to other hospitals or social agencies; only two had unsatisfactory general behavior or personality. Most of the patients had a positive attitude toward clinic care at the Mercy Diabetic Clinic. Most of the patients in the study group felt their over-all problem was related to diet needs; most of the patients were enjoying participation in some type of community organization.

Consideration of the patients' adjustment to diabetes showed that the patients in general had no unusual habits relative to stimulants, drugs, or medication; most of them attended the clinic six or seven times during the period from January 3, 1951 through October 31, 1951; a large majority of them had satisfactory clinic reports for more than one-half or for all of the visits they made; and most of them were prompt in seeking professional medical care after a diagnosis of diabetes. Most of the

patients adjusted well to diet and insulin regulations; and eleven had never been informed their diabetes was at a serious stage and did not feel it had been.

A study of the patients' adjustment to employment disclosed that most of them managed on an income in the range of $100 to $200 a month; fourteen were employed full time; fifteen had not changed jobs in 1951; twelve were following their usual life employment; none had ever been asked to leave a job because of diabetes. Eleven of the patients were satisfied with their present employment; ten of the patients had had diabetic reactions on the job, but with no serious consequences. Eight of the fifteen patients who ate meals on the job carried these from home. Five of these prepared them themselves, the majority of these meals not conforming well to diet requirements. Of the seven patients who purchased meals on the job, five bought meals conforming to diet requirements. Only one patient had to take insulin during employment hours and went to an automobile to do this. A large majority of the patients reported they carefully followed routines prescribed for diet and insulin in the home.

CHAPTER V

SUMMARY AND CONCLUSIONS

A. Purpose and Focus of This Study

It was the purpose of this study to discover significant adjustments of the employed diabetic receiving clinic care. The focus was on the effect of employment on the socio-medical adjustment of the employed diabetic.

B. General Summary of the Study

As a basis for understanding the particular clinic setting in which the study was done, the development and current activity of the Mercy Free Dispensary Clinic was described.

Information concerning diabetes and its general implications was given to show the problems faced by the diabetic in adjusting to this disease.

The study group was described relative to certain aspects of personal and social data in order to clarify some of the features of their socio-medical adjustment. It was discovered that most of the patients were known to the Mercy Diabetic Clinic two to two and one-half years. The study group was almost evenly divided as to sex. The patients' educational background appeared

sufficient for them to grasp and follow the fundamentals in the care and treatment of diabetes. The age range of the group was fairly typical of diabetes sufferers. The patients seemed to be faced with typical problems of marital adjustment, living arrangements, dependents, and personal and family health problems. In spite of the fact that they had the chronic illness, diabetes, they were consistently employed during the period of this study.

Further analysis of the socio-medical adjustment of the patients showed that the majority of the patients were either self-referred or referred by Cook County Hospital. Most of the patients were dealing with problems of health, employment, and financial need, yet very few had contact with the Mercy Free Dispensary Social Service Department. A large majority of them were known to other hospitals or social agencies. The large majority also had satisfactory general behavior and personality and displayed positive attitudes toward the clinic care being given. Their over-all problem, for the most part, was concerned with diet needs. In general the patients were enjoying participation in some kind of organization in the community.

An examination of the adjustments which the patients made to diabetes showed that they had no unusual habits in the use of stimulants, drugs, or medication and most of them were treated in the clinic at least six times during the period covered by this study. There were satisfactory clinic reports for a large majority for more than one-half or all of the visits they

made. After the diabetes was diagnosed most of the patients were prompt in seeking professional medical care and adjusted well to diet and insulin routines. It seemed indicated that in most of the cases the diabetes had never been at a serious stage.

The findings in the areas of the patients' adjustment to employment were as follows for the majority of the group:

Most of the patients had to manage on small incomes, although they were employed full time. They were stable job holders, were following their usual life's work and had never been asked to leave a job because of diabetes. In general they were satisfied with their present employment and in spite of diabetic reactions on the job, had not experienced serious consequences as a result of the reactions. The meals that were prepared at home to eat on the job did not, as a rule, conform to diet requirements, but meals purchased generally did. The taking of insulin on the job was not a problem because all but one of the patients were so well controlled that it was not necessary to take insulin during employment hours. The large majority of the patients indicated that in their home they carefully followed prescribed routines for diet and insulin.

C. Related Studies and Literature

Related studies indicate that the diabetic makes a good adjustment to employment.

A survey of one hundred employed diabetics, made in

1938, showed that seventy-seven per cent lost no time from work due to diabetes, and that after the initial stabilization of treatment for diabetes this figure increased to eighty-five per cent. The survey showed that if diabetics were treated they were in general good employees from a health standpoint.[1] One writer feels that the average diabetic's position in the community should not change because of diabetes and, further, that as an employee he tends to be better than average because he strives to overcome the prejudice often found in employers.[2] It has also been said that the identity of diabetics is lost in the crowd today as they can do almost all of the things the average person can do if they take care of themselves. Further, it has been pointed out that people have become outstanding in many fields in spite of their diabetes. During World War II many diabetics found they could get a job without concealing their ailment and employers found that absenteeism among them was not high and that there was no unusual risk in employing them. General Motors recognized these facts.[3] A study of the performance of diabetics in manufacturing industries in 1947 presented the conclusion that if physically impaired workers, including diabetics, are given

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1 R. D. Lawrence and Kate Madders, "The Employment of Diabetics", British Medical Journal, London, November, 1938, 1076.

2 Tangney, Diabetes, 244.

3 Yahraes, Good News About Diabetes, 22, 24.

reasonable job placement and consideration of their abilities in relation to the job requirements, they are able to successfully compete with unimpaired workers placed under similar conditions.[4]

It has been pointed out that the death rates from accident have not increased in industry among diabetics although they are living longer and are, therefore, exposed more to the possibility of accidents. Finally, important studies on the work records of diabetics indicate that their records are satisfactory.[5]

D. Conclusions

The study presented here seems to correlate with the literature in related areas. In this study, the results of inquiry into and analysis of certain social and medical factors of a group of employed diabetics receiving clinic care imply the predominance of favorable effects environing employment.

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4 U. S. Department of Labor, Bureau of Labor Statistics, The Performance of Physically Impaired Workers in Manufacturing Industries, 1948, No. 923, Washington, 1948, 3.

5 Louis I. Dublin and Herbert H. Marks, "The Diabetic in Industry and His Employer", Industrial Medicine and Surgery, Chicago, XIX, June, 1950, 279-282.

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APPENDIX I

THE QUESTIONNAIRE

1. How long have you known that you had diabetes? Date_____
   Date of 1st Diab. Med. Care _____

2. Please express your feelings about the following: Diet and insulin:

   Diet: Dislike for it__ Liking for it__Indifferent__

   Problem to follow it: Yes __ No__

   Insulin: Dislike for it__ Liking for it__Indifferent__

   Problem to follow it: Yes __ No__

3. Were you ever informed by medical authorities that your diabetes was at a serious stage? Yes __ No __ Date _____

4. What is your present job and approximate mo. salary?_____

5. Is your work full time or part time? Full__Part__No. jobs in 1951__ so far_____

6. Is this the kind of work you have usually done? Yes__ No___

7. Was a change necessary due to diabetes? Yes___ No___

8. What kind of work did you do before the change due to diabetes and what was the approximate salary?_____

9. What problems arose on the job you gave up because of diabetes that were connected with this illness?_____

   _____

   Did the management request that you leave because of diabetes? Yes ___ No ____

10. Do you feel that a type of job other than the one you are doing would be more satisfactory? Yes__ No__ Main reason_____

11. If you desire a change, what type of job would you prefer?____

12. Have you ever had a diabetic "reaction" on the job? Yes_ No__
On past job__ On present job__

a. Concerning this "reaction" please state:

(1) What you were doing when it began_____

(2) How it affected you_____

(3) What you did to counteract it_____

(4) What was the general reaction of fellow-workers_____

(5) The general reaction of your employer_____

b. State any conditions connected with your present or past work that you consider problems affecting the care or treatment of your diabetes: _____

_____

_____

13. Concerning your eating arrangements on your present job, please state:

No. meals on job___Meal taken to job from home__Meal carried to job prepared by____No. meals purchased___Conformation of meals to diet requirements: Good__ Fair __ Poor __

14. Concerning the taking of insulin on your present job, please state:

Av. no. times taken ___ Where you go to take insulin_____

Is insulin self-administered: Yes ___ No ___

15. In connection with your arrangement at home, please state:

Meal times regular: Yes ___ No ___ Comment _____

No. meals at home on working days_____ Other days _____

Meals prepared by_____ Insulin administered by_____

16. What do you consider as your over-all problem in connection with diabetes? _____

17. If you have had service from the clinics listed below state your feelings as to:

Soc. Serv: a. Convenience____ Time consumed____Service_____

Psychiatric: ____ ____ _____

Diabetic: ____ ____ _____

b. Additional comments _____

_____

18. Do you enjoy working in community organizations? Yes__ No___

Comment_____

19. Name the community organizations in which you are an active member:_____

APPENDIX II

THE SCHEDULE

Clinic#_____ Social Code_____

Social Data
IDENTIFYING INFORMATION

Date admission to clinic_____ Sex: M___ F___ Birthplace: U.S.___ Foreign Country_

Command of English: Adeq._____ Inadeq._____ Birthdate_____

Marital Status: No. times M___ Div___ Sep___ Single __ Widowed___

Housing: Floor _____ Room _____

Hshd. Mem:	Fa.	Mo.	Sis.	Bro.	Spouse	Child	Other Rel.	Other	None
No. dpnts:									
Non-dpnts:									
Dpts. out of home									

Economic Status and Type of occupation: Prof. & Managerial ____ Clerical & Sales ____ Service___Skilled__Unskilled__Semi-skilled__

Other sources of income: Roomers__Spouse__Property__Rel. outside home_____ Pension__Soc. Agency__Rel.in home___ None_____

Insurance: Yes___ No___ Veteran: Yes___ No____

Source of referral to Mercy Clinic:_____

SOCIAL ADJUSTMENT

Types of problems currently indicated:
None__Employment__Familial__Non-familial relationships__Health___

Clinic__ Mental__ Diabetic__ Financial__ Other_____

Type of problems indicated in past:

None___Employment__ Familial__Non-familial relationships__Health__

Clinic__Mental___Diabetic___Financial___ Other_____

Contact indicated with:	No. Contacts	St. term	Long term	Type Prob.
Soc. Serv. Dept:				
Psychiatric Dpt:				
Another Organization:				
Type Organization _____				
Other clinic or hosp:				

No. other clinics or hosps: _____

Medical Data

FAMILY MEDICAL DATA

	Living	Dead	Age at Death	Cause
Father:				
Mother:				
Brother:				
Sister:				

Serious illnesses experienced in family_____

Marital Aspects: 1st Marriage: Duration__ Spouse's Health: Good__ Fair__ Poor__

Deceased__ Cause_____

2nd Marriage: Duration__ Spouse's Health: Good__ Fair__ Poor__

Deceased__ Cause _____

3rd Marriage: Duration__ Spouse's Health: Good__ Fair__ Poor__

Deceased__ Cause_____

Last Marriage if not above: Duration__ Spouse's Health: Good__ Fair__ Poor__

PERSONAL MEDICAL DATA

Drugs:
Alcohol___ Tea___ Coffee___Tobacco____Medicine___ Other_____

Occupational Hazards: Yes___No___ Length of time employed at time of admission_____

Other health exams
for life ins., jobs, etc.: Passed___Failed___ None Taken_____

Previous medical treatment: Yes _____ No _____

Ailments other than diabetes currently or formerly diagnosed:

If so: Dates _____ Ailment_____ Yes___ No___
_____ _____
_____ _____

Yes No
Now receiving medical care: Yes__ No__ Plan Med. care soon __ __

PSYCHIATRIC DATA

General behavior: Normal___Deviation from Normal___Comment_____

Stream of mental activity: Good__Average___Slow___Other_____

Schooling: None__No.Yrs: Grade Sch__ H.S.__Col.__Grad__Degrees___

Personality: Satisfactory_____ Disturbed_____

DIABETIC CLINIC RECORD

For period_____ No. visits_____

	Satis.	Unsatis.	None
No. reports on urine sugar:	_____	_____	_____
Last visit:	_____	_____	_____
No. reports on diet:	_____	_____	_____
Last visit:	_____	_____	_____

No. referrals for Social Service _____

No. referrals for Psychiatric Care _____

APPENDIX III

LIST OF CLINICS IN THE MERCY FREE DISPENSARY

1 Allergy
2 Arthritis
3 Audiogram
4 Cardiac
5 Cerebral Palsy
6 Chest
7 Child Guidance
8 Dermatology
9 Diabetes
10 Diagnostic General Medicine
11 Ear, Nose and Throat
12 Endocrine
13 Eye
14 Food
15 Gastro-intestinal
16 Gynecology
17 Hematology
18 Neuro-psychiatry
19 Neuro-surgery
20 Neurology
21 Obstetrics
22 Oral Surgery
23 Orthopedics
24 Pediatric
25 Peripheral Vascular
26 Physiotherapy
27 Plastic Surgery
28 Proctology
29 Psychology
30 Radiation
31 Speech
32 Surgery
33 Treatment - General Medicine
34 Tumor
35 Urology